

Appln No. 10/646,971

Amdt date November 22, 2004

Reply to Office action of September 14, 2004

REMARKS/ARGUMENTS

Claims 1-12 are pending. Claims 1, 3-6, and 8 are amended.

Claims 1, 3-9 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Blazo (U.S. 5,754,437). Claims 2 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blazo in view of Cova (U.S. 6,141,390). Applicants submit that all of the pending claims in the application are patentable over the cited references, and reconsideration and allowance of this application are respectfully requested.

Independent claims 1 and 5 include, among other limitations, "means for converting the variable frequency input signal to an interpolated signal at a fixed sampling frequency in accordance with said phase offset signal, wherein the interpolated signal is interpolated by a value of M/N where M and N are integers," and independent claim 6 includes, among other limitations, "interpolation means for offsetting a pair of variable frequency input signals in accordance with the phase offset signal to provide an interpolated signal at a fixed output sampling frequency, wherein the interpolated signal is interpolated by a value of M/N where M and N are integers." Blazo does not teach or suggest the above limitations.

Rather, the CIC interpolating filter 76 of Blazo interpolates "the integrated frequency control data from the DSP 44 representing the second frequency components of the phase difference below the loop bandwidth of the PLL 36 is . . . back to 25.92 MHZ rate." (Col. 12, lines 49-53). This 25.92 MHZ rate is the system clock 68 rate that controls the timing of the circuit. (Col. 8, lines 59-60). As a result there are several

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differences between the claimed invention and apparatus of Blazo.

First, the interpolation of Blazo is not "in accordance with said phase offset signal," as recited by the independent claims 1, 5 and 6. Instead, the integrated frequency control data from the DSP is interpolated back to the same rate as the system clock, no matter what the phase offset is. Second, the interpolation of Blazo does not interpolate "by a value of M/N where M and N are integers," as recited by the independent claims 1, 5 and 6. Rather the fixed frequency signal from the DSP is interpolated back to 25.92 MHz rate. Third, the apparatus of Blazo does not offset "a pair of variable frequency input signals," as required by the independent claim 6. Accordingly, independent claims 1, 5, and 6 are not anticipated by Blazo.

In short, the independent claims 1, 5 and 6 define a novel and unobvious invention over the cited references. The dependent claims 2-4, and 7-12 are all dependent from their respective independent claims and therefore include all the limitations of their respective independent claims and additional limitations therein. Accordingly, these claims are also allowable for the same reason set forth hereinbefore as well as the additional limitations recited.

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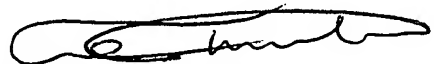
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In view of the foregoing amendments and remarks, it is respectfully submitted that this application is now in condition for allowance, and accordingly, reconsideration and allowance are respectfully requested.

Respectfully submitted,
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